Chapter 1

Introduction

Combat power is generated by combining the elements of maneuver, firepower, force protection, and leadership within a sound plan and then aggressively, violently, and flexibly executing the plan to defeat an enemy. The key to using combat power effectively is gathering information about the enemy and the area of operations (AO) through recon. A recon provides current battlefield information that helps a commander plan and conduct tactical operations. A recon greatly enhances maneuver, firepower, and force protection when properly executed.

ORGANIZATION

Engineer recon elements may consist of an engineer platoon, squad, team, or other element. During military operations, the engineer may be called on to assist the maneuver force during recon missions. These missions are normally executed by engineer recon teams, which are organized according to unit SOPs. (See Chapter 4 for a complete discussion of the engineer recon team.) Engineer recon teams may operate independently; however, they normally augment cavalry scout platoons; mechanized, wheeled, or dismounted scout platoons; or other maneuver units directly involved in recon operations. The most prominent scout platoon in a force is the high-mobility, multipurpose wheeled vehicle (HMMWV) scout platoon.

If an engineer recon team is to augment a maneuver scout element, the team should be task-organized with equipment that is compatible with the supported maneuver recon force. The engineer team may use its own vehicle or ride in the vehicles of the scout, cavalry, or infantry unit it supports. It may move mounted or dismounted, depending on its current equipment, organization, command and control (C^2) structure, and enemy situation.

MISSIONS

An engineer recon team's primary mission is collecting tactical and technical information for the supported or parent unit. The team must be able to perform this mission mounted or dismounted, during the day or at night, and in various terrain conditions.

A tactical recon is conducted in a high-threat environment and is a combined-arms effort to—

- Collect information about the enemy's location and obstacles and the terrain within the AO.
- Conduct limited marking of obstacles, routes, and demolition work.
- Conduct limited reduction of obstacles in conjunction with maneuver units.

A technical recon is conducted in a low-threat environment. It may or may not be a combined-arms effort to collect engineer-specific technical data on a point or area target or route (see Chapter 5).

CHARACTERISTICS, CAPABILITIES, AND LIMITATIONS

An engineer recon team normally conducts operations as part of a larger combined-arms force. This team has capabilities and limitations that must be considered when they are employed.

GENERAL ORGANIZATIONAL CHARACTERISTICS

Characteristics of a typical recon team include the following:

- The engineer recon team usually depends on both the parent and supported unit for combat support (CS) and combat service support (CSS).
- The scout platoon may perform a recon of two routes simultaneously (for trafficability only) if the engineer recon team is performing a recon with a HMMWV scout platoon.
- The engineer element will assist in reconning a zone 3 to 5 kilometers wide when working with a scout platoon during a zone recon mission. Mission, enemy, terrain, troops, and time available (METT-T) conditions may increase or decrease the zone's size.
- The engineer recon team must train and rehearse in detail with the unit it supports to ensure that all soldiers understand the recon TTP.

ENGINEER RECON TEAM CAPABILITIES

An engineer recon team has the following capabilities. It—

- Increases the supporting unit's recon capability concerning complex mine and wire obstacle systems, enemy engineer activities, and details of mobility along a route.
- Provides detailed technical information on any encountered obstacle.
- Conducts an analysis of what assets will be needed to reduce any encountered obstacle.
- Marks bypasses of obstacles based on guidance from the supported commander. This guidance includes whether to mark bypasses and in which direction the force should maneuver when bypassing an obstacle.
- Assists in gathering basic enemy information.
- Provides detailed technical information on routes (including classification) and specific information on any bridges, tunnels, fords, and ferries along the route.
- Assists in acquiring enemy engineer equipment on the battlefield.
- Assists in guiding the breach force to the obstacle to be reduced.

ENGINEER RECON TEAM LIMITATIONS

An engineer recon team has the following limitations:

- Engineer battalions do not have personnel and equipment listed on the table(s) of organization and equipment (TOE) and the modified table(s) of organization and equipment (MTOE) dedicated to conduct a recon (see Figures 1-1 through 1-5, pages 1-3 through 1-7).

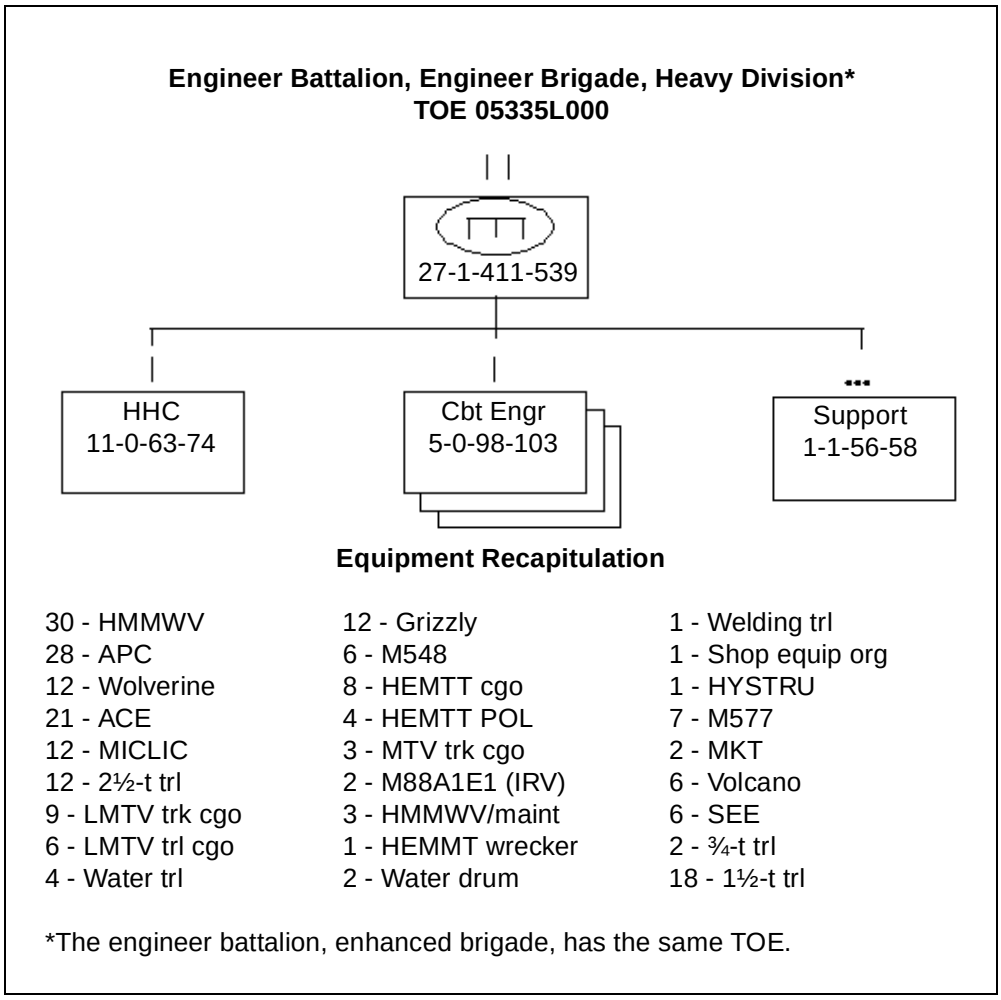

Figure 1-1. Engineer battalion, engineer brigade, heavy division

- The recon team has a limited ability to destroy or repel enemy recon units and security forces.
- The distance the engineer recon team can operate away from the main body is restricted to the range of communications, the range of supporting indirect fires, and the ability to perform CSS operations.
- The recon team has a limited communications capability. Based on the radio configuration of the vehicle used during the recon and whether the engineer recon team is working under a maneuver element's

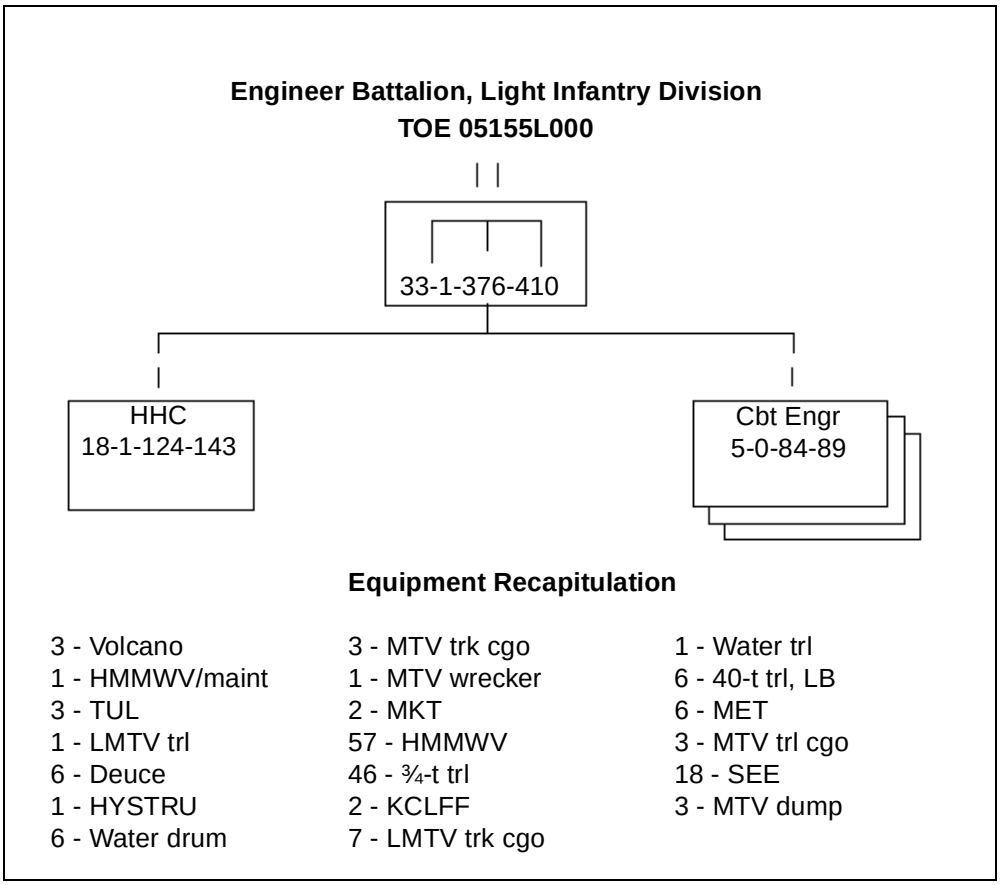

Figure 1-2. Engineer battalion, light infantry division

control, dedicated monitoring of engineer nets may be difficult. However, with the single-channel, ground-to-air radio system (SINCGARS), the recon team should be able to scan critical engineer nets or, at the very least, easily switch to the engineer net to report obstacle intelligence (OBSTINTEL).

- The engineer recon team has very limited obstacle creation and reduction ability. It normally carries only a light basic load of demolitions, according to the unit's SOP. Obstacle reduction is normally limited to manually reducing obstacles not covered by enemy fires and observation.

PLATFORM-SPECIFIC CAPABILITIES

An engineer recon team depends on its organic equipment and the equipment of the unit it supports. Both the engineers and the supported unit must determine the best combination of equipment based on METT-T.

The two engineer vehicles commonly used in recon operations are the M113A3 armored personnel carrier (APC) and the M998 HMMWV. Both vehicles are effective recon platforms when appropriately employed; however, security must come from the supported unit because the vehicles have limited firepower. The engineer must maximize his vehicle's capabilities and minimize

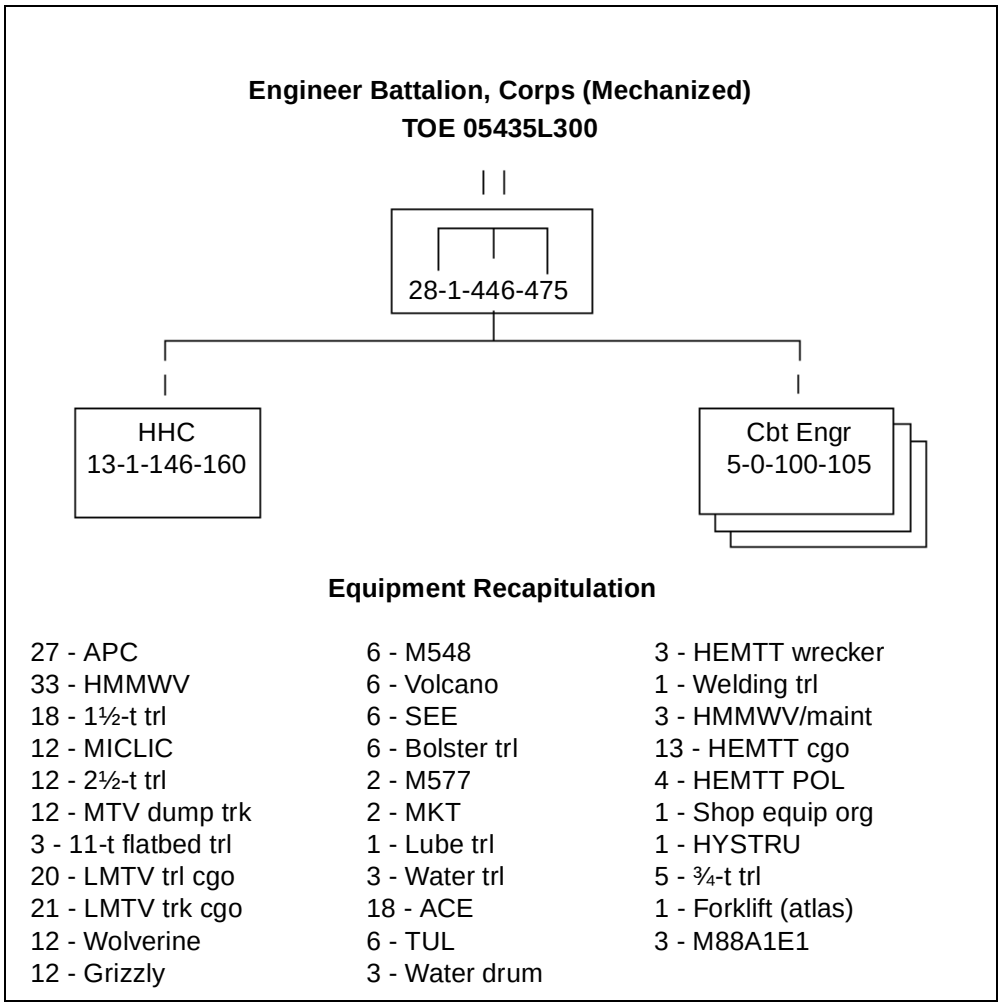

Figure 1-3. Engineer battalion, corps (mechanized)

its limitations. A third type of platform is that of a supported maneuver unit when it provides the engineer space on board its vehicle.

COMMAND AND SUPPORT RELATIONSHIPS

Engineers are task-organized a variety of ways, depending on the mission and current requirements. This task organization drives an engineer recon team's command or support relationship.

ATTACHED

When attached, a recon team is temporarily placed in the unit it supports. The commander of the supported unit exercises the same degree of C^2 as he does over his organic units. In this relationship, the recon team receives all of its missions and support from the supported unit, not its organic engineer unit. Additionally, the supported-unit commander may task-organize the recon team as he feels is appropriate.

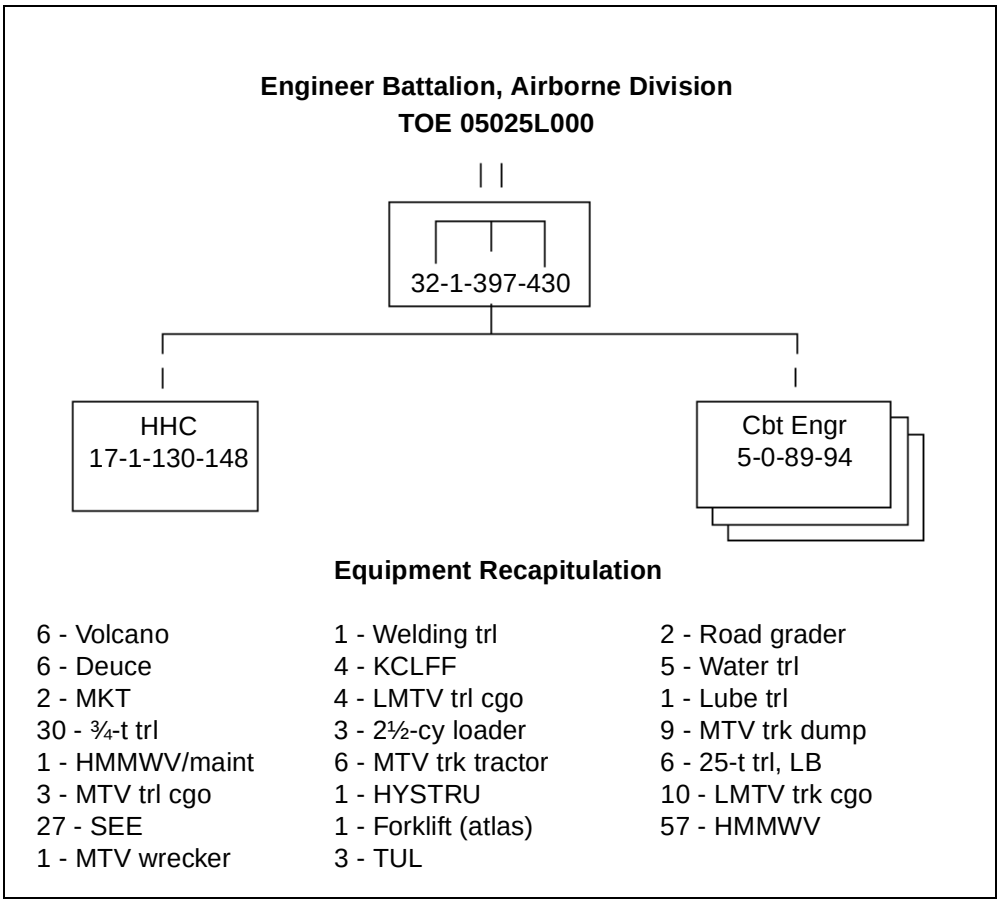

Figure 1-4. Engineer battalion, airborne division

OPERATIONAL CONTROL (OPCON)

In an OPCON relationship, a recon team receives all of its tasking and missions from the supported unit. The supported-unit commander retains the same authority over the recon team as over his organic units and may task-organize the recon team as he feels is appropriate. Logistical support comes from the parent engineer unit unless the engineer battalion has coordinated with the supported unit for certain classes of supply.

DIRECT SUPPORT (DS) AND GENERAL SUPPORT (GS)

In a DS relationship, a recon team answers directly to the supported unit's requests for support. Logistical support is provided by the parent engineer unit, and the recon team is commanded by its parent engineer unit commander. In a GS relationship, a recon team receives missions and all support from its parent engineer unit.

Engineer Battalion, Air-Assault Division
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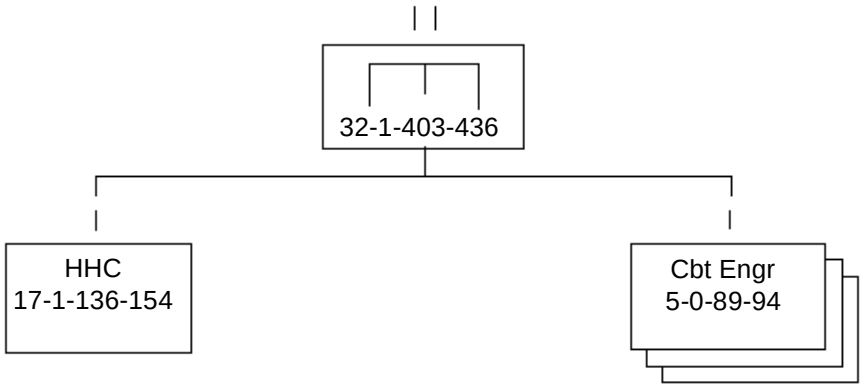

Equipment Recapitulation

59 - HMMWV	2 - MKT	12 - T3 dozer
2 - Water trl	1 - 2½-cy loader	1 - LMTV trl cgo
27 - SEE	1 - HMMWV/maint	1 - MTV wrecker
6 - LMTV trk cgo	6 - 25-t trl, LB	1 - TUL
6 - MTV trk dmp	4 - KCLFF	1 - MTV trl cgo
41 - ¾-t trl cgo	1 - HYSTRU	6 - Volcano
1 - MTV trk cgo	6 - MTV tractor	5 - Water drum

Figure 1-5. Engineer battalion, air-assault division